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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,154	11/12/2003	Robert F. Buck	33045.12	7571

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HAYNES AND BOONE, LLP
901 MAIN STREET, SUITE 3100
DALLAS, TX 75202

EXAMINER

YEE, DEBORAH

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 07/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/706,154		BUCK, ROBERT F.	
	Examiner		Art Unit	
	Deborah Yee		1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4-28-04, 3-31-04</u> | 6) <input checked="" type="checkbox"/> Other: <u>IDS 3-19-04</u> |

DETAILED ACTION***Double Patenting***

1. Claims 1 to 28 of this application conflict with claims 1 to 28 of Application No. 10/431,680. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 29 to 42 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 28 of copending Application No. 10/431,680. Although the conflicting claims are not identical, they are not patentably distinct from each other because they disclose the same fine-grained iron base martensitic alloy composition in addition to the the $2 < \text{Ni} < 5$, $\text{Co} < 4$,

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Cu <1.2 , Si<1 and N<0.02 of the co-pending application '680 overlapping or encompassing the $1 < \text{Ni} < 5$, $\text{Co} < 10$, $\text{Cu} < 5$, $\text{Si} < 1.5$, and $\text{N} < 0.05$ recited in claims 29 to 42.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 to 8, 19 to 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denhard, Jr. (US Patent 3,660,176).

5. Denhard on lines 9-27 in column 2 discloses a martensitic steel having a composition with alloying constituents whose wt% ranges overlap those recited by claims 1-8 and 29 to 32; such overlap renders applicant's composition prima facie obvious since it would have been obvious to one of ordinary skill in the art to select the claimed alloy ranges from the broader disclosure of the prior art because the prior art has similar properties, such as martensitic microstructure and fine grain size of 13-14 ASTM. See MPEP 2144.05.

6. Although prior art does not recite the additional elements such as V, B, Ce, Mg, Sc, Y, La, Be etc., such would not be a patentable difference since these elements have a lower limit of zero and therefore optional.

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7. Similar to claims 2, 6, and 30, Denhard on lines 37 to 42 discloses alloy being subjected to mechanically rolling or drawing to form rod, wire, bar sheet, or strip. Also note rod is tubular in shape and would be patentably equivalent to tubular product recited in claims 3, 4, 7, 8, 31 and 32.
8. Claims 19 and 24 discloses an alloy having a composition which falls within the broad alloy wt% ranges disclosed by Denhard on lines 9-27 in column 2 except for Ti. Note that claims recite 0.37% Ti or 15% of 0.37%Ti which equals 0.428%Ti whereas the prior art discloses a lower limit of 0.5%. Since applicant has not demonstrated criticality of the Ti range (e.g. by comparative test data), then a composition with 0.428% Ti vs. a composition with slightly more Ti (say 0.5%) would depict a mere difference in the proportion of element with no attendant unexpected results and hence would not patentably distinguish claim over prior art.
9. In regard to claims 20 to 23 and 25 to 28, Denhard on lines 37 to 42 discloses mechanically rolling or drawing steel to form an article such as a rod which would be equivalent in shape to a tubular product.
10. Claims 1 to 18 and 29 to 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ernst et al. (US Patent 6,030,469).
11. Ernst in claims 1 and 2 of column 12 discloses a martensitic steel having a composition with alloying constituents whose wt% ranges overlap or closely approximate those recited by claims 1 to 18 and 29 to 42; such overlap or close approximation renders applicant's composition prima facie obvious since it would have been obvious to one of ordinary skill in the art to select the claimed alloy ranges from the broader disclosure of the prior art because the prior art has similar properties, such as martensitic

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microstructure and fine grain size of less than 50 microns (claim 20, column 14), see MPEP 2144.05.

12. Although prior art alloy contains 0.12 to 0.25% N whereas present invention alloy contains less than 0.02%N and less than 0.05%N such would not be a patentable difference since it would be a matter of choice well within the skill of the artisan to lower N to produce the known and expected results of such a decrease which would be less nitrides to provide higher ductility and less hardness. Note that the omission of an element with the consequent loss of its function is not a patentable distinction. In any event the differences would amount to no more than routine optimization of an alloying constituent to achieve the desired balancing of properties which is well within the skill of the artisan and productive of no new and unexpected results.

13. In regard to claims 2 to 4, 6 to 8, and 30 to 32, Ernst on lines 28 to 30, column 2 and lines 25 to 30, column 9 teach mechanically working steel to form products such as pipe, which is equivalent in shape to a tubular product.

14. In regard to method claims 9 to 18 and 33 to 42, Ernst on lines 25 to 67, column 9 discloses hot forging (equivalent to hot working) at 1230 to 1050C (within claimed range of above 1000C) followed by solution annealing and quenching and tempering. Although the strain value of greater than 0.15 is not taught by prior art, such would be expected to occur during the hot working step since a fine grain size is obtained.

15. Ernst on lines 28 to 30, column 2 teaches forming steel into pipe which meets claims 11,12, 35 and 36. Prior art claim 30 of column 14 recites a grain size of less than 50 microns and is within the ASTM grain size number of 5 or greater recited in claims 13 and 37. Ernst on lines 25 to 67 discloses austenitizing, quenching and tempering alloy

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after working which meets claims 14, 15, 18, 38 and 39. Moreover, prior art in Figure 2 treats alloy to solution annealing at 1180C followed by air cooling which is equivalent to normalizing and hence meet claims 16, 17, and 40 to 42.

Information Disclosure Statement

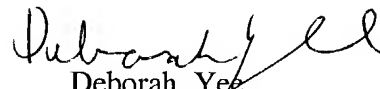
16. The information disclosure statement filed March 31, 2000 and April 28, 2004 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Yee whose telephone number is 571-272-1253. The examiner can normally be reached on Monday-Friday from 6:00 to 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Deborah Yee
Primary Examiner
Art Unit 1742

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